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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,432	07/23/2003	Toshiro Tojo	FUJI 20.526	9820

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EXAMINER	
ZHENG, EVA Y	

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/626,432	TOJO ET AL.	
	Examiner	Art Unit	
	Eva Yi Zheng	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(e) as being unpatentable by Kuwahara et al (US 6,647,276).

a) Regarding to claims 1 and 6, Kuwahara et al disclose a data transmission apparatus comprising:

a spread spectrum processing part that performs spread spectrum process on an input signal (block 13 and 15 in Fig. 1);

an analog-to-digital conversion part that performs an analog-to-digital conversion process on a signal that has undergone said spread spectrum process (block 4 in Fig. 1); and

an inverse spread spectrum processing part that performs an inverse spread spectrum process of said spread spectrum process on a signal that has undergone said analog-to-digital conversion process (block 7 and 9 in Fig. 1).

b) Regarding to claims 2 and 7, Kuwahara et al disclose the data transmission apparatus as claimed in claim 1, wherein said spread spectrum process is performed

using a predetermined PN sequence (Col 3, L34-37).

c) Regarding to claims 3 and 8, Kuwahara et al disclose the data transmission apparatus as claimed in claim 2, wherein a PN sequence number of said PN sequence is set to a value that is adequate for substantial improvement in the precision of said analog-to-digital conversion process so that transmission data contained in the input signal can be detected with predetermined precision (inherent in the radio station as shown in Fig. 1; Col 4, L21-36).

d) Regarding to claims 4 and 9, Kuwahara et al disclose the data transmission apparatus as claimed in claim 1, further comprising:

a gain controlling part that performs a signal gain controlling process on an input signal, wherein said spread spectrum processing part performs a spread spectrum process on a signal that has undergone said signal gain controlling process (phase and amplitude calibration block 11 in Fig. 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwahara et al (US 6,647,276) in view of Kato et al. (US 6,021,137).

e) Regarding to claim 5, Kuwahara et al disclose a power line carrier communication system comprising:

data transmission apparatus comprising:

a spread spectrum processing part that performs spread spectrum process on an input signal (block 13 and 15 in Fig. 1);

an analog-to-digital conversion part that performs an analog-to-digital conversion process on a signal that has undergone said spread spectrum process (block 4 in Fig. 1); and

an inverse spread spectrum processing part that performs an inverse spread spectrum process of said spread spectrum process on a signal that has undergone said analog-to-digital conversion process (block 7 and 9 in Fig. 1).

Kuwahara et al disclose all the subject matters above except for the specific teaching of a power line and terminate to a data transmission apparatus.

However, Kato et al. disclose such a power line functioning as a data transmission path for transmitting data (5 in Fig. 1); and a data transmission apparatus that terminates the power line (1-4 in Fig. 1).

It is well known that communication system can be used with power line, wireless, infrared, laser and many other methods. Therefore, it is obvious to one of ordinary skill in art to combine the teaching of power line by Kato et al. in the transmission system of Kuwahara. By doing so, perform data transmission with better power control.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eva Y Zheng whose telephone number is 571-272-3049. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eva Yi Zheng
Examiner
Art Unit 2611

September 13, 2006

CHIEH M. FAN
SUPERVISORY PATENT EXAMINER